FIG. 1
PRIOR-ART

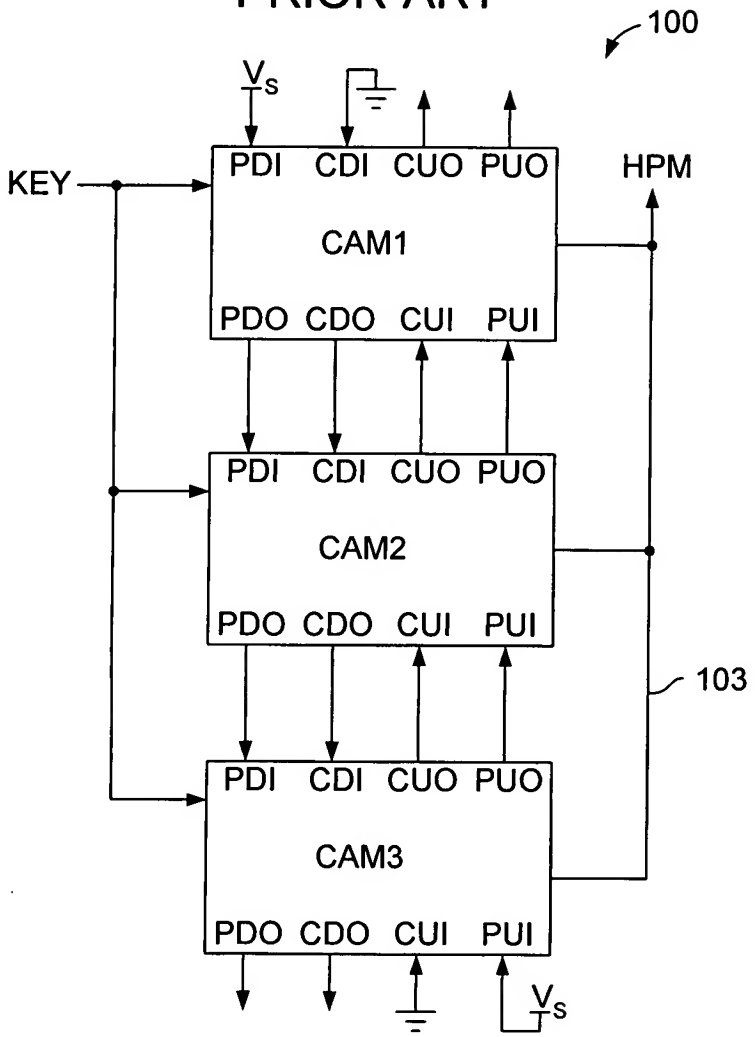
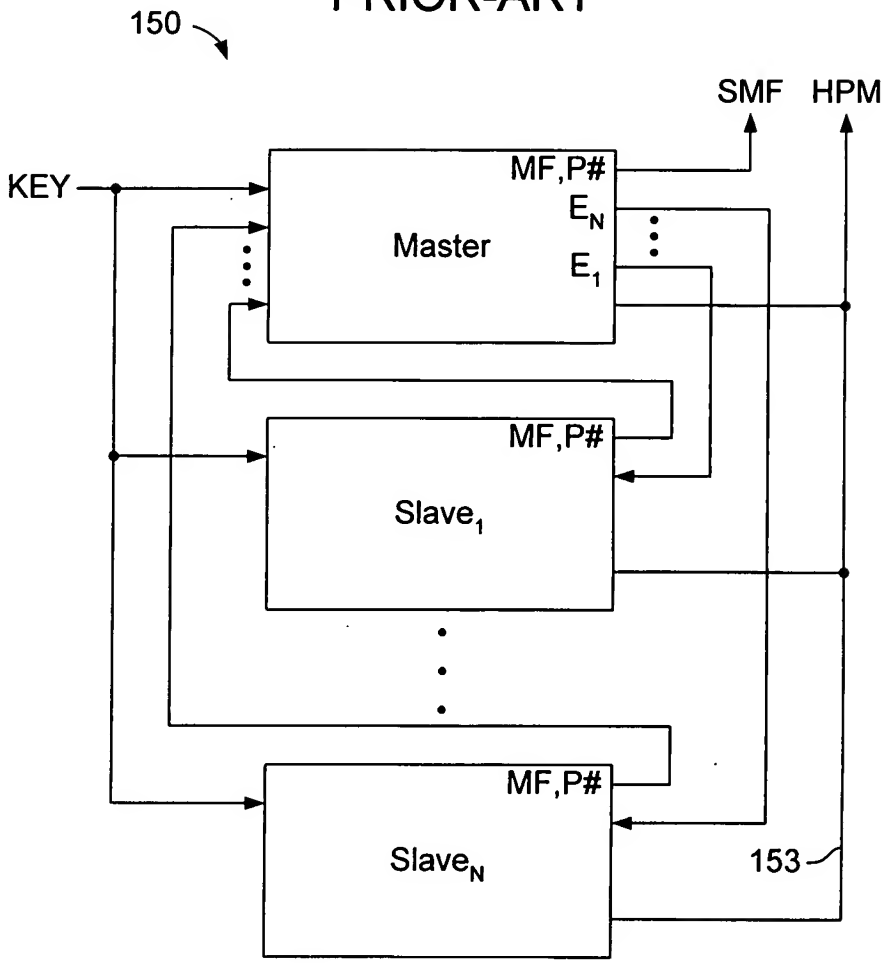


FIG. 2
PRIOR-ART



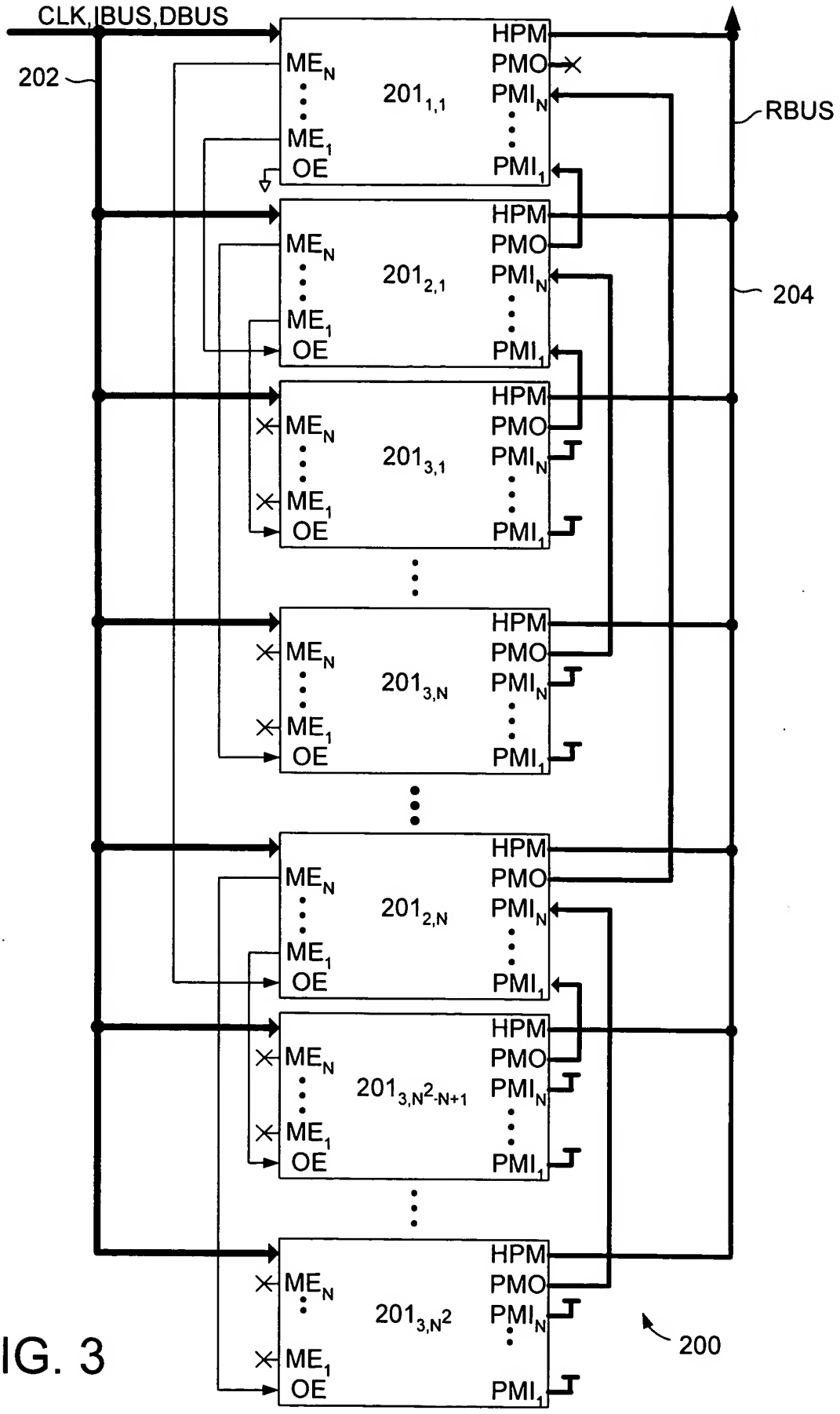
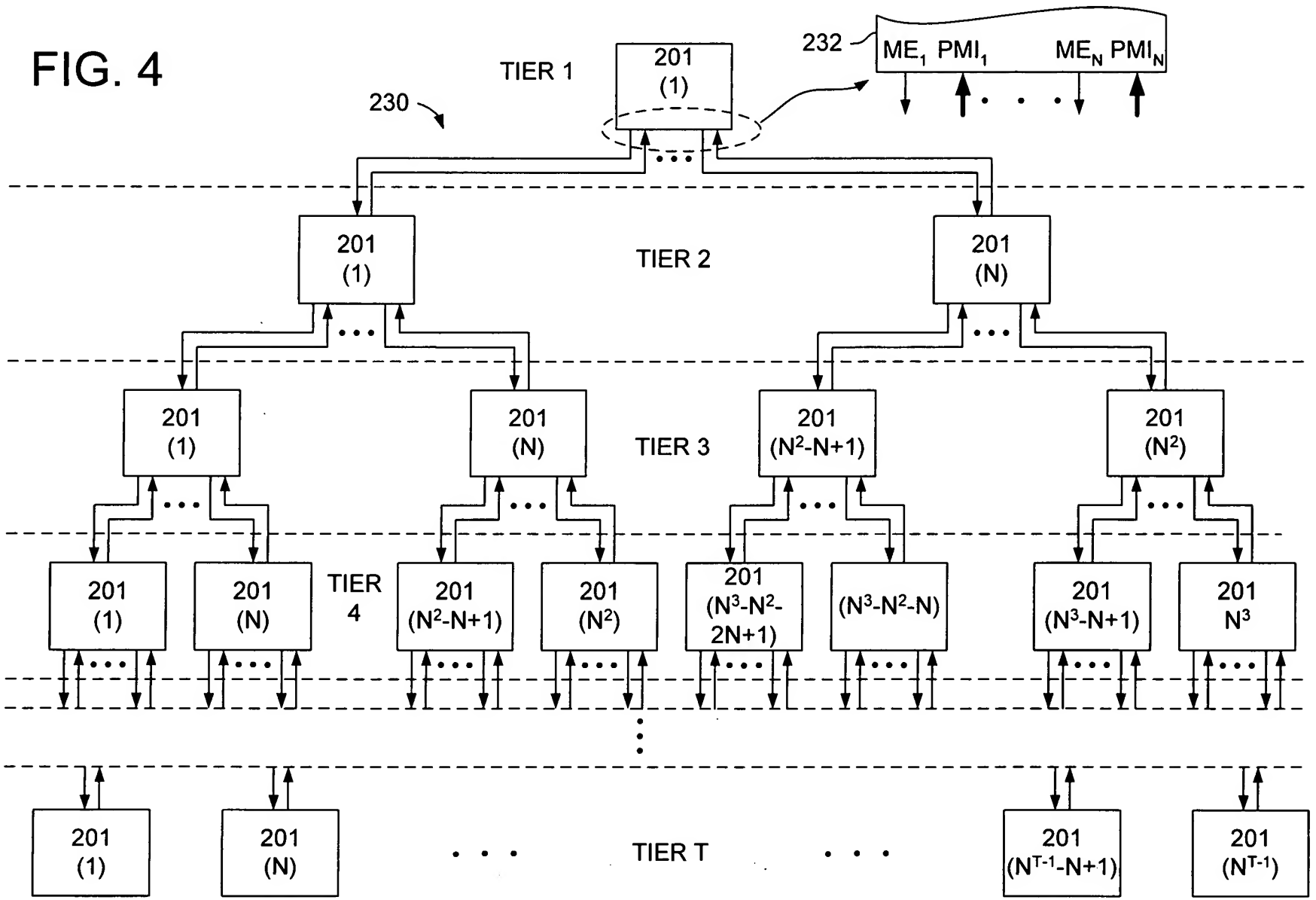

CLK,IBUS,DBUS
202
RBUS
204
200
HPM
PMO
PMI_N
PMI_1
ME_N
ME_1
OE
201_1,1
201_2,1
201_3,1
201_3,N
201_2,N
201_3,N^2-N+1
201_3,N^2

FIG. 3

FIG. 4


230
TIER 1
201 (1)
232
ME1 PMI1
MEN PMIN
TIER 2
201 (1)
201 (N)
TIER 3
201 (1)
201 (N)
201 (N2-N+1)
201 (N2)
TIER 4
201 (1)
201 (N)
201 (N2-N+1)
201 (N2)
201 (N3-N2-2N+1)
(N3-N2-N)
201 (N3-N+1)
201 N3
TIER T
201 (1)
201 (N)
201 (NT-1-N+1)
201 (NT-1)

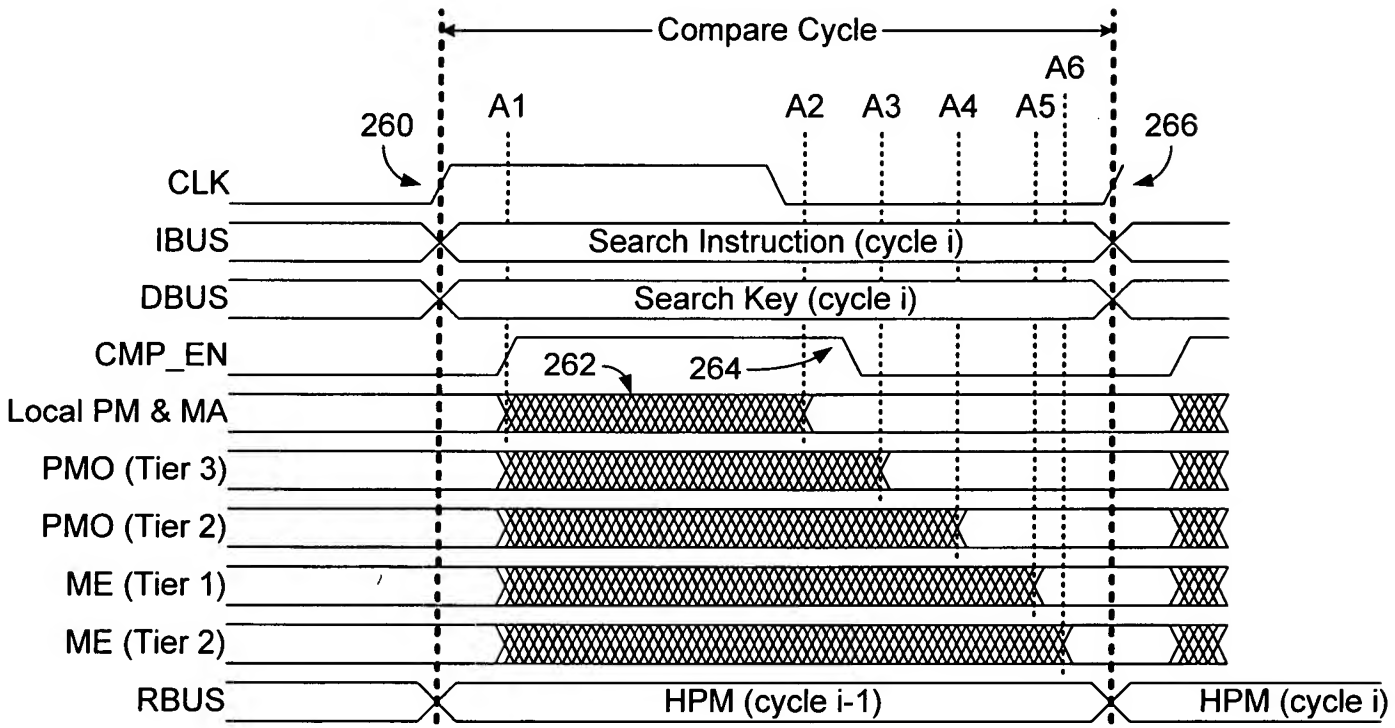
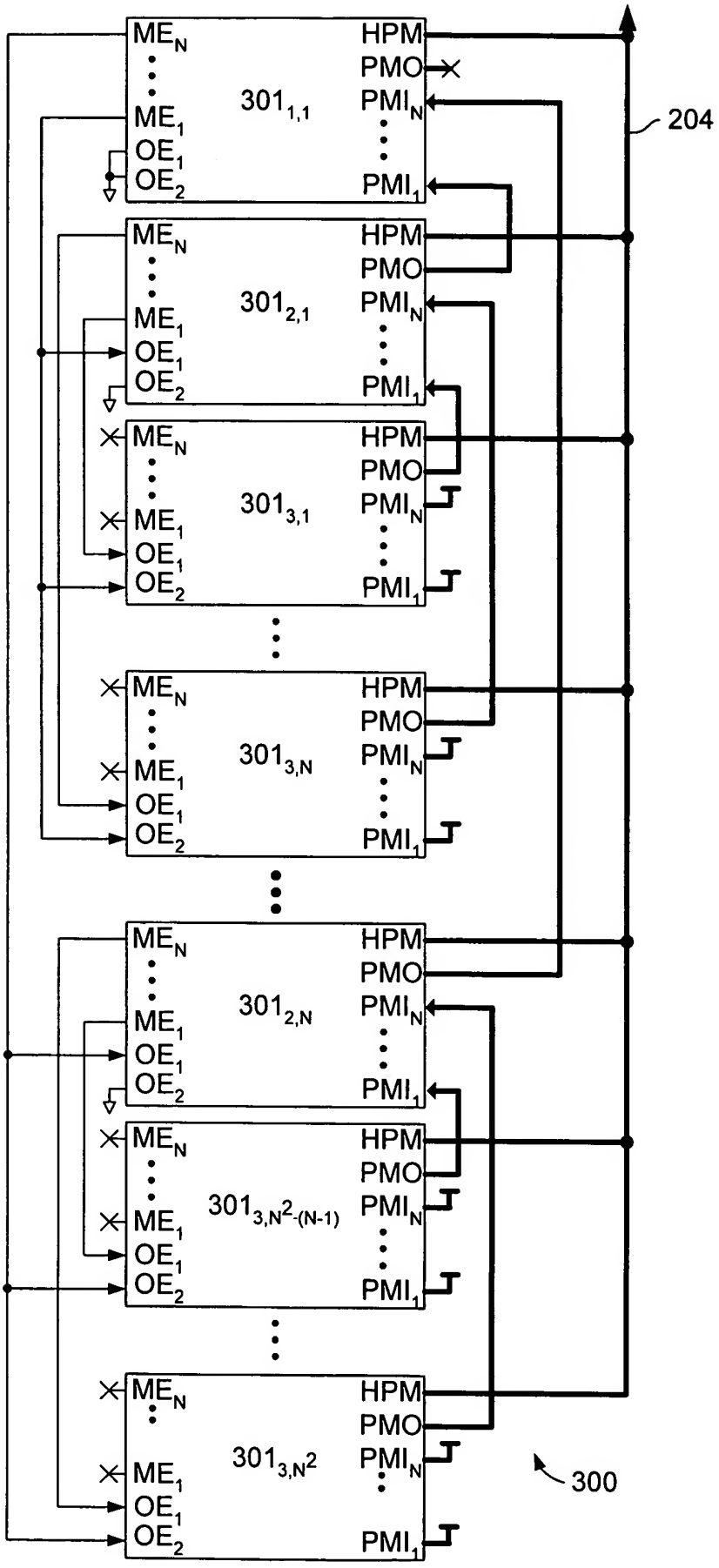

Compare Cycle
A6
A1
A2
A3
A4
A5
260
266
CLK
IBUS
Search Instruction (cycle i)
DBUS
Search Key (cycle i)
CMP_EN
262
264
Local PM & MA
PMO (Tier 3)
PMO (Tier 2)
ME (Tier 1)
ME (Tier 2)
RBUS
HPM (cycle i-1)
HPM (cycle i)

FIG. 5

FIG. 6


ME_N
ME_1
OE_1
OE_2
HPM
PMO
PMI_N
PMI_1
301_1,1
301_2,1
301_3,1
301_3,N
301_2,N
301_3,N2-(N-1)
301_3,N2
204
300

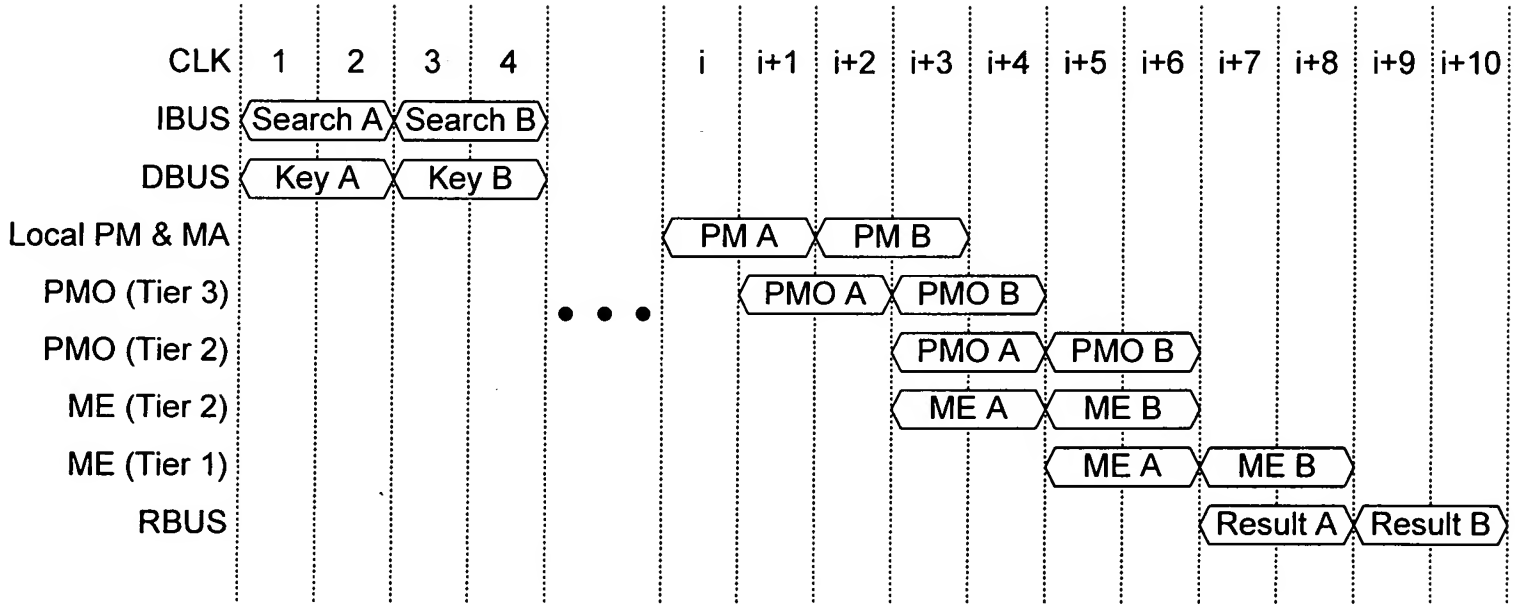

CLK
1
2
3
4
i
i+1
i+2
i+3
i+4
i+5
i+6
i+7
i+8
i+9
i+10
IBUS
Search A
Search B
DBUS
Key A
Key B
Local PM & MA
PM A
PM B
PMO (Tier 3)
PMO A
PMO B
PMO (Tier 2)
PMO A
PMO B
ME (Tier 2)
ME A
ME B
ME (Tier 1)
ME A
ME B
RBUS
Result A
Result B

FIG. 7

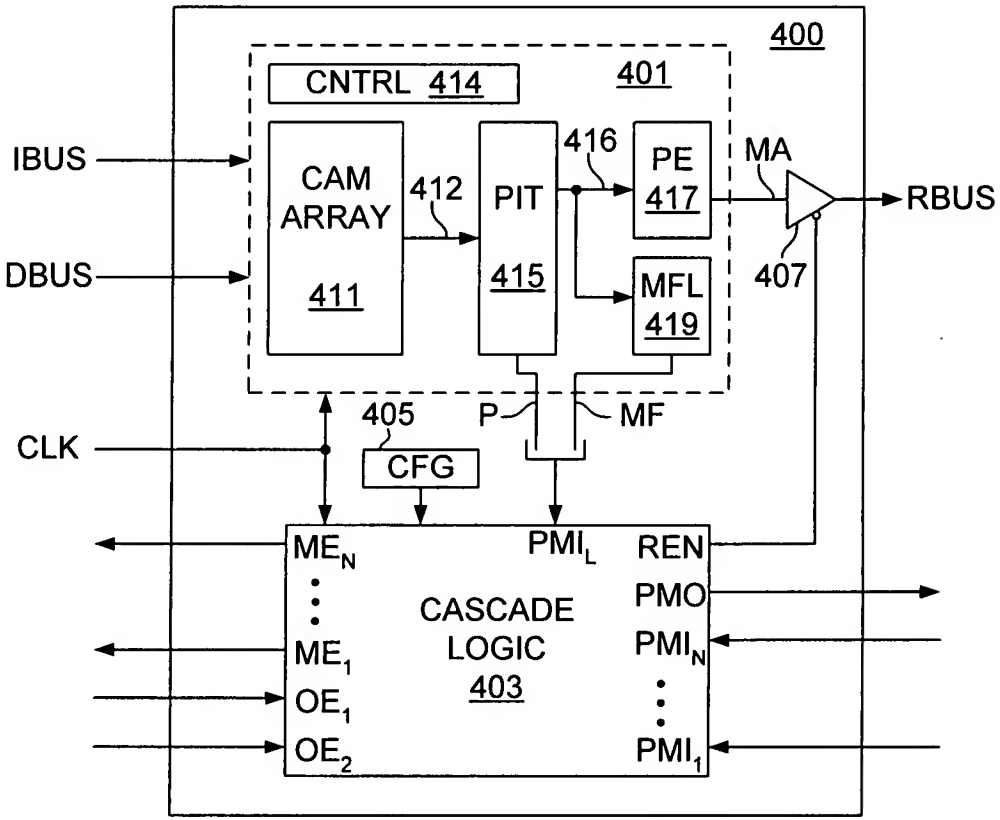

400
CNTRL 414
401
IBUS
DBUS
CAM ARRAY 411
412
PIT 415
416
PE 417
MA
RBUS
MFL 419
407
CLK
405
CFG
P
MF
ME_N
ME_1
OE_1
OE_2
PMI_L
CASCADE LOGIC 403
REN
PMO
PMI_N
PMI_1

FIG. 8

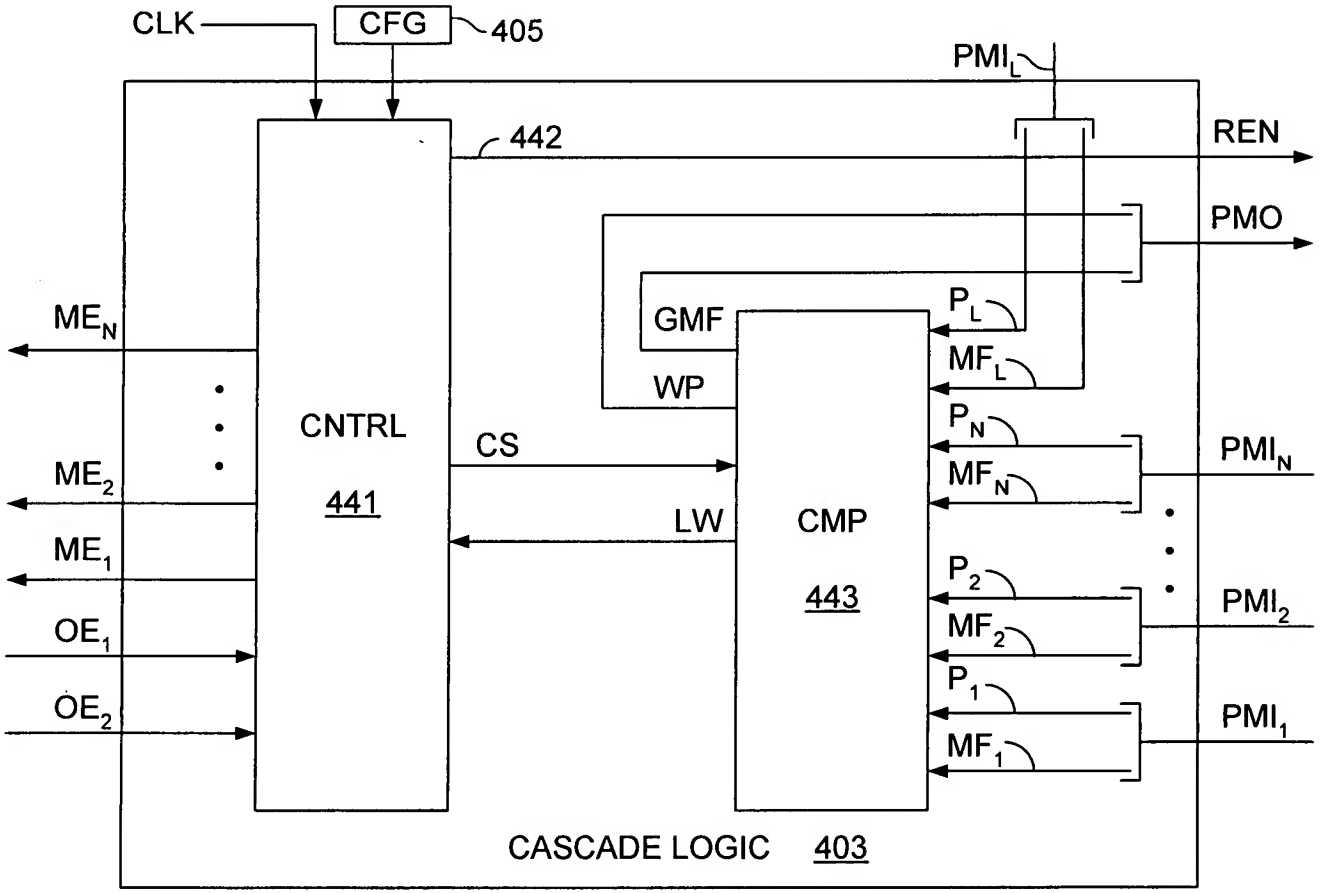

CLK
CFG
405
PMI_L
442
REN
PMO
GMF
P_L
MF_L
WP
ME_N
CNTRL
441
CS
P_N
MF_N
PMI_N
ME_2
LW
CMP
443
ME_1
P_2
MF_2
PMI_2
OE_1
P_1
MF_1
PMI_1
OE_2
CASCADE LOGIC 403

FIG. 9